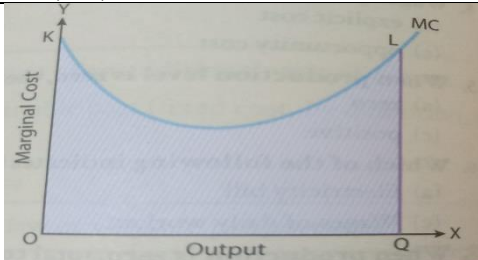


SECTION A-MICRO ECONOMICS

INSTRUCTIONS:

All questions in both sections are compulsory. Marks are indicated against each question.

1.	<p>Read the following statements carefully and choose the correct alternative from the following: Statement 1: MC is affected by change in TVC and is independent of TFC. Statement 2: MC is a U-shaped curve due to operations of returns to a factor input. Alternatives: (a) Both the statements are true. (b) Both the statements are false. (c) Statement 1 is true and Statement 2 is false. (d) Statement 2 is true and Statement 1 is false</p>	1																
[2.	<p>In case of _____, an increase in demand will lead to rise in equilibrium quantity, but no change in equilibrium price a) Perfectly elastic supply. b) Perfectly inelastic supply c) Highly elastic supply. d) Less elastic supply</p>	1																
3.	<p>Assertion (A): Both AR and MR coincide in a horizontal straight line parallel to X-Axis. Reason: (R): Under perfect competition, AR=MR and both are constant. Alternatives: (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A). (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A). (c) Assertion (A) is true but Reason (R) is false. (d) Assertion (A) is false but Reason (R) is true.</p>	1																
4.	<p>Dr. Vivek Aggarwal is running a dental clinic at his home. He has invested 2,00,000 as capital and he also borrowed 1,00,000 from Axis Bank at an interest rate of 9% p.a. He has also hired an assistant monthly salary of 12,000. The estimated monthly rental of his clinic is 25,000. Calculate the annual explicit cost if imputed annual value of services of Dr.Vivek Aggarwal is 4,00,000.</p>	1																
5.	 <p>What does the shaded area show? (a) TFC (b) TVC (c) TC (d) ATC</p>																	
6.	Distinguish between Extension of Supply and Increase in Supply.	3																
7.	<table border="1"> <thead> <tr> <th>Output (Units)</th> <th>Price</th> <th>Total Revenue</th> <th>Marginal Revenue</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>9</td> <td>36</td> <td>-</td> </tr> <tr> <td>5</td> <td>-</td> <td>-</td> <td>4</td> </tr> <tr> <td>6</td> <td>-</td> <td>42</td> <td>-</td> </tr> </tbody> </table>	Output (Units)	Price	Total Revenue	Marginal Revenue	4	9	36	-	5	-	-	4	6	-	42	-	
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4	9	36	-															
5	-	-	4															
6	-	42	-															

	7	6	-	0											
	Complete the above table.				3										
8.	The market for a good is in equilibrium. At a given price, there is excess demand for a good. Explain how the equilibrium price will be reached in this situation. Use diagram. OR Under which market form, a firm is called a price taker? Discuss it's features in detail.				4										
9.	At a price of ₹6 per unit, the quantity supplied of a commodity is 200 units. If the price rises by ₹3 per unit, quantity supplied rises by 20%. Calculate Price Elasticity of Supply. OR Describe the conditions of producer's equilibrium with a hypothetical example when price remains constant. Use MR-MC Approach along with a diagram.				4										
10.	Explain the Law of Variable Proportions through the behaviour of both total product and marginal product. OR Define Average Fixed Cost (AFC) , Average Variable Cost (AVC) and Average Cost (AC). Draw a diagram with the help of an imaginary schedule and discuss the shapes of AFC ,AVC and AC curves.				6										
SECTION B-STATISTICS FOR ECONOMICS															
11.	Read the following statements carefully and choose the correct alternative from the following: Statement 1: Median divides the series in to four equal parts. Statement 2: Median can not be computed in open ended series. Alternatives: (a) Both the statements are true. (b) Both the statements are false. (c) Statement 1 is true and Statement 2 is false. (d) Statement 2 is true and Statement 1 is false				1										
12.	Identify the correct sequence of alternatives given in column II by matching them with respective items in Column I. <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Column I</th> <th style="width: 50%;">Column II</th> </tr> </thead> <tbody> <tr> <td>A. Exclusive series</td> <td>(i) Upper limit of last class interval is missing.</td> </tr> <tr> <td>B. Discrete variables</td> <td>(ii) Frequency values are expressed as %ages of the total frequency.</td> </tr> <tr> <td>C. Open ended series</td> <td>(iii) Value of the upper limit of a class interval is not included in that class.</td> </tr> <tr> <td>D. Relative frequency</td> <td>(iv) Assume values in complete numbers.</td> </tr> </tbody> </table> (a) A-(iv), B-(iii), C-(i), D-(ii) (b) A-(iii), B-(iv), c-(i), D-(ii) (c) A-(ii), B-(iv), C-(iii), D-(i) (d) A-(iv), B-(ii), c-(i) D-(iii)				Column I	Column II	A. Exclusive series	(i) Upper limit of last class interval is missing.	B. Discrete variables	(ii) Frequency values are expressed as %ages of the total frequency.	C. Open ended series	(iii) Value of the upper limit of a class interval is not included in that class.	D. Relative frequency	(iv) Assume values in complete numbers.	1
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D. Relative frequency	(iv) Assume values in complete numbers.														
13.	State true or false with reason. Under Purposive sampling, population is divided in to different groups having different characteristics.				1										
14.	In an asymmetrical distribution Mean is 20 and Median is 25 Mode is (a) 30. (b) 35. (c) 22. (d) None of the above				1										
15.	Read the following statements Assertion (A) and Reason (R). Choose one of the correct alternatives given below: Assertion (A): Non-linear correlation does not form a straight-line relationship.														

	<p>Reason (R) : In case of multiple correlation, the entire set of independent and dependent variables is simultaneously studied.</p> <p>Alternatives:</p> <p>(A) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of A</p> <p>(b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of A</p> <p>(c) Assertion (A) is true but Reason (R) is false</p> <p>(d) Assertion (A) is false but Reason (R) is true</p>	1																																				
16.	<p>. Read the given Case study and answer the following questions.</p> <p>The main objective of the organisation of data is to arrange the data in such a form that it becomes fairly easy to compare and analyse. Generally, we can do this by distributing data into various classes on the basis of some attribute or characteristic. This distribution of data into classes is called the classification of data. Further, each division of data is a class. All in all, through the process of classification, we can group and divide data into classes according to a general attribute, which facilitates comparison and analysis.</p> <p>(i) An attribute is (Choose the correct alternative)</p> <p>(a) a qualitative characteristic (b) a measurable characteristic</p> <p>(c) a quantitative characteristic (d) All of these.</p> <p>(ii) Which are the two types of qualitative classification?</p> <p>(iii) When the data is classified according to geographical location or region, it is known as _____.</p>	3																																				
17.	Distinguish between random sampling and systematic sampling. Give suitable examples.	3																																				
18.	<p>Highlight the properties of correlation.</p> <p style="text-align: center;">OR</p> <p>Present the following information in the form of histogram and locate the modal value give a cross check to your answer calculating mode through its standard formula.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>Class Interval</td> <td>0-10</td> <td>10-20</td> <td>20-30</td> <td>30-40</td> <td>40-50</td> <td>50-60</td> <td>60-70</td> </tr> <tr> <td>Frequency</td> <td>4</td> <td>8</td> <td>14</td> <td>20</td> <td>30</td> <td>15</td> <td>6</td> </tr> </table>	Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	Frequency	4	8	14	20	30	15	6	4																				
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19.	<p>Find the missing frequencies, when the median value is 47 and N=458</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>Size</td> <td>10-20</td> <td>20-30</td> <td>30-40</td> <td>40-50</td> <td>50-60</td> <td>60-70</td> <td>70-80</td> </tr> <tr> <td>Frequency</td> <td>24</td> <td>60</td> <td>-</td> <td>130</td> <td>?</td> <td>50</td> <td>36</td> </tr> </table>	Size	10-20	20-30	30-40	40-50	50-60	60-70	70-80	Frequency	24	60	-	130	?	50	36	4																				
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20	<p>Calculate the correlation coefficient between X and Y and comment on their relationship.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>X</td> <td>16</td> <td>12</td> <td>18</td> <td>4</td> <td>3</td> <td>10</td> <td>5</td> <td>12</td> </tr> <tr> <td>Y</td> <td>23</td> <td>22</td> <td>24</td> <td>17</td> <td>19</td> <td>20</td> <td>18</td> <td>21</td> </tr> </table> <p style="text-align: center;">OR</p> <p>Find out the coefficient of rank correlation between X and Y.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>X</td> <td>46</td> <td>56</td> <td>39</td> <td>45</td> <td>54</td> <td>58</td> <td>36</td> <td>40</td> </tr> <tr> <td>Y</td> <td>30</td> <td>60</td> <td>40</td> <td>50</td> <td>70</td> <td>70</td> <td>30</td> <td>50</td> </tr> </table>	X	16	12	18	4	3	10	5	12	Y	23	22	24	17	19	20	18	21	X	46	56	39	45	54	58	36	40	Y	30	60	40	50	70	70	30	50	6
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